

VOLVO CAR CORPORATION

EXECUTIVE ORDER A-018-0139 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 & 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED:

That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	TEST GROUP	VEHICLE TYPE	EXHAUST EMISSION STANDARD CATEGORY	STANDARD CATEGORY (miles) (*=N/A or full in-use; A/E=exh. / evap. Intermediate in-use)				FUEL TYPE	
2002	6VVXV02.4U2N	B	"LEV II" Ultra Low Emission Vehicle (LEV II	EXH / ORVR	EVAP	EXH	EVAP	Gasoline	
2006	600XVU2.4U2N	Passenger Car	ULEV)	120K	150K	A	E	Gasonie	
No.	ECS & S	PECIAL FEATURES	EVAPORATIVE FAMILY (EVAF) DISPLACEMENT (L)						
1	TWC, HAF	S, HO2S, SFI, OBD(P)	EVAPORATIVE 6VVXR	6VVXR0130EV2					
*	*		6VVXR	0132EV2	7		4		
•	*			*		2	2.4		
*		*		*					

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations.

BE IT FURTHER RESOLVED:

That the exhaust and the evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's "NMOG Fleet Average" (PC or LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

BE IT FURTHER RESOLVED:

That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this <u>2674</u> day of May 2005.

llen Mons, Chief

Mobile Source Operations Division

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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

(For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

AVERAG		CH4 R	y RAF=* AF = *	NMOG or	IMOG or HCHO=formaldehyde; PM=particulate matter; RAF=reactivity adjustment factor; 2/3 D [g/test]=2/3 day diurnal+											
CERT	STD	NMOG	NMHC	NMHC STD										gram		
0.036	0.046	CERT [g/mi]	CERT [g/mi]	[g/mi]	CO	g/mi]	NOx	[g/ml]	нсно	[mg/mi]	PM [g/mi]		x [g/mi]		
Complete Commission of the Association of the Commission of the Co	<u> </u>	farmd	[a,,]	ļ	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD		
	@ 50K	0.033	*	0.040	0.4	1.7	0.01	0.05	*	8.		*	0.002	0.07		
	@ UL	0.045	*	0.055	0.6	2.1	0.01	0.07	*	11.	*	•	0.002	0.09		
0	50°F & 4K	0.067	•	0.080	0.4	1.7	0.01	0.05	*	16.	+	*	*	*		

CO [g/ml]		interference of				CO [g/mi] NMHC+ composite) [g/mi] [l					NMHC+NOx [g/mi] [SC03]		CO [g/mi] [SC03]	
	0°F & 50K		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
CERT	1.6	SFTP @ 4000 miles	•	* "	*	*	0.03	0.14	0.2	8.0	0.03	0.20	0.2	2.7
STD	10.0	SFTP@ * miles	*	· * ***	*	*	*	*	*	*	•	*	*	*

Evaporative Family		al + Hot Soak est) @ UL	2-Days Diurn (grams/te	al + Hot Soak est) @ UL	Runnin (grams/m		On-Board Refueling Vapor Recovery (grams/gallon) @ UL		
	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
6VVXR0130EV2	0.49	0.50	0.54	0.65	0.01	0.05	0.11	0.20	
6VVXR0132EV2	0.31	0.50	0.32	0.65	0.01	0.05	0.04	0.20	
*	*	*	•	*	*	*	+	+	
* '	+	+	*	*	*		*	+	

* = not applicable; UL=useful life; PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; ECS= Emission Control System; STD= Standard; CERT= Certification; LVW=loaded vehicle weight; ALVW=adjusted LVW; LEV=low emission vehicle; TLEV=transitional LEV; ULEV=ultra LEV; SULEV=super ULEV; TWC=3-way catalyst; ADSTWC=adsorbing TWC; WU=warm-up catalyst; OC=oxidizing catalyst; OZS=oxygen sensor; HO2S=heated O2S; AFS/HAFS=air- fuel ratio sensor / heated AFS; EGR=exhaust gas recirculation; AIR=secondary air injection; PAIR=pulsed AIR; MFI= multiport fuel injection; SFI=sequential MFI; TBI=throttle body injection; DGI=direct gasoline fuel injection; TC/SC= turbo/super charger; CAC=charge air cooler; OBD (F)/(P)=full/partial on-board diagnostic; DOR=direct ozone reducing; prefix 2=parallel; (2) suffix=series; CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85="85%" Ethanol Fuel;

2006 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	EVAPORATIVE FAMILY	ECS NO.	ENGINE SIZE (L)	IN-I COMPI (*=N/A or A/E=exi	MEDIATE USE LIANCE full in-use; h. / evap. ate in-use)	PHASE-IN STD.	OBD II
					EXH	EVAP		
· VOLVO	S60 FWD	6VVXR0130EV2	1	2.4	A	Ę	SFTP	Partial
VOLVO	V70 FWD	6VVXR0130EV2	1	2.4	Α	Ε	SFTP	Partial
VOLVO	S40 2.4i	6VVXR0132EV2	1	2.4	Α	E	SFTP	Partial
VOLVO	V50 2.4i	6VVXR0132EV2	1	2.4	Α	E	SFTP	Partial